

“La Sapienza” University of Rome – Department of Economics

“Planning and Strategic Management” Course

a.a. 2019/2020

Beatrice Valente Covino



Agenda

- Industry analysis: the fundamentals/objectives
- Industry profitability: determinants/US Industries
- The spectrum of industry structures
- Porter's Five Forces Competition Framework
- Competition: determinants, substitutions, threats
- Rivalry with Competitors
- Bargaining Power of Buyers/Suppliers
- Industry Boundaries and Key Success Factors
- The Industry Evolution Life Cycle and driving forces
- Product and Process Innovation
- Portfolio Planning Models
- Technology diffusion: S-curves
- Need for change...
- High-road Strategy

Industry Analysis: fundamentals

OUTLINE

- Industry Analysis objectives
- From Environmental Analysis to Industry Analysis
- Analyzing Industry Attractiveness
- Applying industry analysis to Forecasting Industry Profitability
- Using Industry Analysis to Develop Strategy
- Defining Industries: Where to Draw the Boundaries
- From Industry Attractiveness to Competitive Advantage: Identifying Key Success Factors

Industry Analysis: objectives

- To understand how industry structure drives competition, which then determines the level of industry profitability
- To assess industry attractiveness
- To use evidence on the changes in industry structure, formulate strategies, and then forecast or improve future profitability
- To identify key success factors.



Industry to Environmental Analysis



- The Industry Environment lies at the core of the Macro environment
- The Macro Environment impacts the firm through its effect on the Industry Environment.

Industry Profitability: determinants

Customer Value does not necessarily yield profit. The value created is distributed between customers and producers by the forces of competition.

The profits earned by the firms in an industry are determined by three factors:

1. The value of the product to customers
2. The intensity of competition
3. Relative bargaining power at different stages of the value chain.



Analyzing Industry Attractiveness

Profitability of US Industries Median return on equity (%), 2000-2013

TABLE 3.1 The profitability of US industries, 2000–2013

Industry ^a	Median ROE (%) ^b	Leading companies
Tobacco	36.2	Philip Morris Intl., Altria, Reynolds American
Household and Personal Products	27.0	Procter & Gamble, Kimberly-Clark, Colgate-Palmolive
Food Consumer Products	21.7	PepsiCo, Kraft Foods, General Mills
Food Services	21.7	McDonald's, Yum! Brands, Starbucks
Pharmaceuticals	20.5	Pfizer, Johnson & Johnson, Merck
Medical Products and Equipment	18.0	Medtronic, Baxter International, Boston Scientific
Petroleum Refining	17.9	ExxonMobil, Chevron, ConocoPhillips
Aerospace and Defense	16.5	Boeing, United Technologies, Lockheed Martin
Chemicals	16.4	Dow Chemical, DuPont, PPG Industries
Construction and Farm Equipment	15.9	Caterpillar, Deere, Cummins
Securities	15.2	BlackRock, KKR, Franklin Resources
Mining, Crude Oil Production	15.0	Conoco Phillips, Occidental Petroleum, Freeport-McMoRan
IT Services	14.9	IBM, Xerox, Computer Sciences
Specialty Retailers	14.6	Home Depot, Costco, Lowe's
Healthcare Insurance and Managed Care	13.0	United Health Group, WellPoint, Aetna
General Merchandisers	12.9	Wal-Mart, Target, Sears Holdings
Communications Equipment	12.2	Cisco Systems, Motorola, Qualcomm
Pipelines	12.0	Plains All American, Enterprise Products, ONEOK
Engineering, Construction	11.9	Fluor, Jacobs Engineering, KBR
Commercial Banks	11.5	Bank of America, JPMorgan Chase, Wells Fargo
Automotive Retailing and Services	10.8	AutoNation, Penske, Hertz
Computers, Office Equipment	10.8	Apple, Hewlett-Packard, Dell Computer
Food and Drug Stores	10.2	CVS, Kroger, Walgreens
Utilities: Gas and Electric	9.6	Execon, Duke Energy, Southern
Packaging and Containers	9.6	Rock-Ten, Ball, Crown Holdings
Insurance: Property and Casualty	9.0	Berkshire Hathaway, AIG, Allstate
Semiconductors and Electronic Components	8.6	Intel, Texas Instruments, Jabil Circuit
Hotels, Casinos, Resorts	8.1	Marriott International, Las Vegas Sands, MGM Resorts
Insurance: Life and Health	7.9	MetLife, Prudential, Aflac
Metals	7.7	Alcoa, US Steel, Nucor
Forest and Paper Products	7.1	International Paper, Weyerhaeuser, Domtar
Telecommunications	7.0	Verizon, AT&T, Comcast
Motor Vehicles and Parts	6.4	GM, Ford, Johnson Controls
Entertainment	6.1	Time Warner, Walt Disney, News Corp.
Food Production	5.9	Archer Daniels Midland, Tyson Foods, Smithfield Foods
Airlines	-7.1	United Continental, Delta Air Lines, American Airlines

Analyzing Industry Attractiveness

- Basic premise that underlies industry analysis is that the level of industry profitability is neither random nor the result of entirely industry-specific influences: **it is determined by the systematic influences of the industry's structure.**
- The underlying theory of how industry structure drives competitive behavior and determines industry profitability is provided by **industrial organization (IO) economics**. The two reference points are the:
 - the theory of monopoly (*high entry barriers*)
 - the theory of perfect competition (*no entry barriers*)

Analyzing Industry Attractiveness

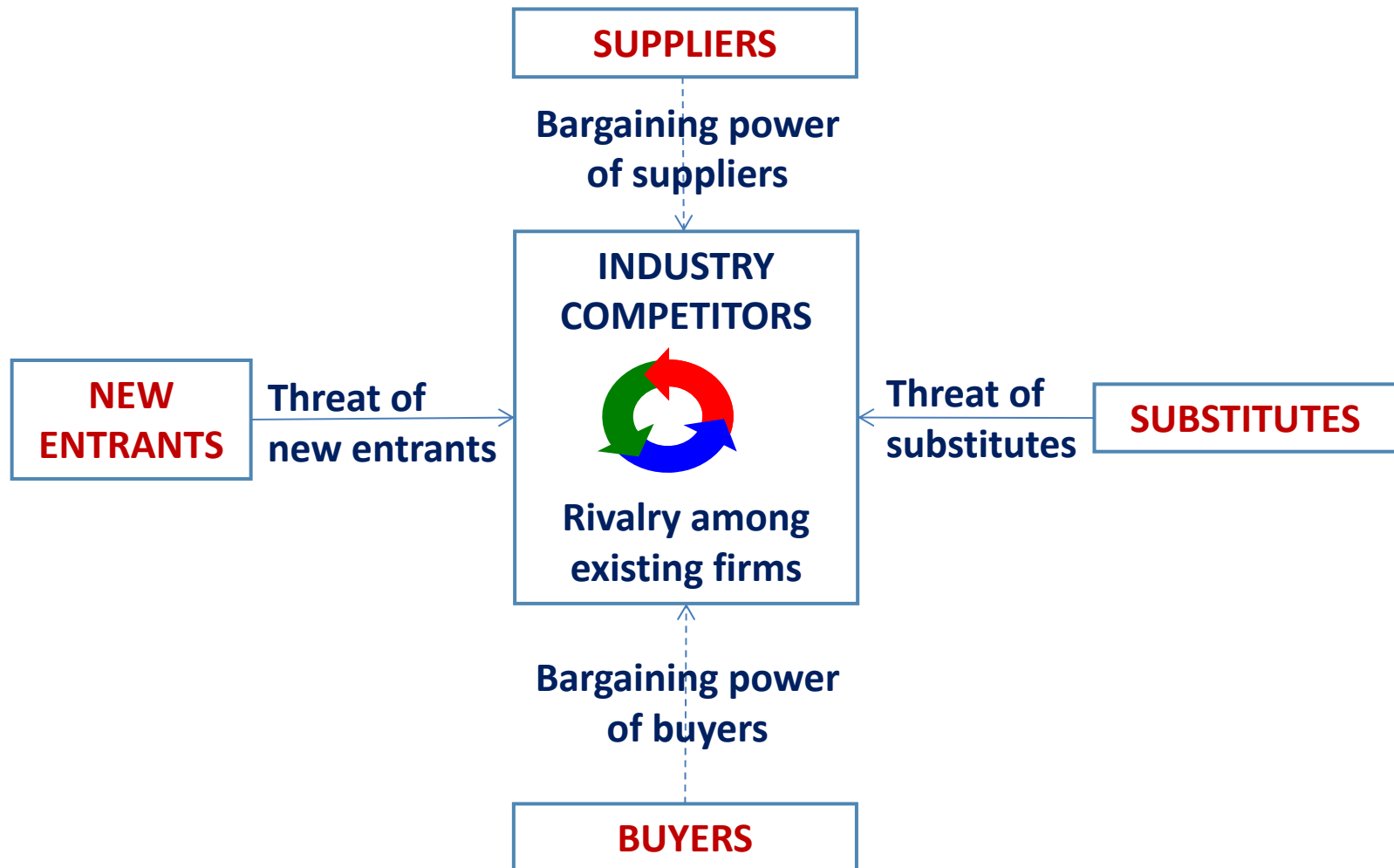
The Spectrum of Industry Structures

	Perfect Competition	Oligopoly	Duopoly	Monopoly
Concentration	Many firms	A few firms	Two firms	One firm
Entry and Exit Barriers	No barriers	Significant barriers		High barriers
Product Differentiation	Homogeneous product	Potential for product differentiation		
Information	Perfect information flow	Imperfect availability of information		

Market Control



Porter's Five Forces Competition Framework (1/2)



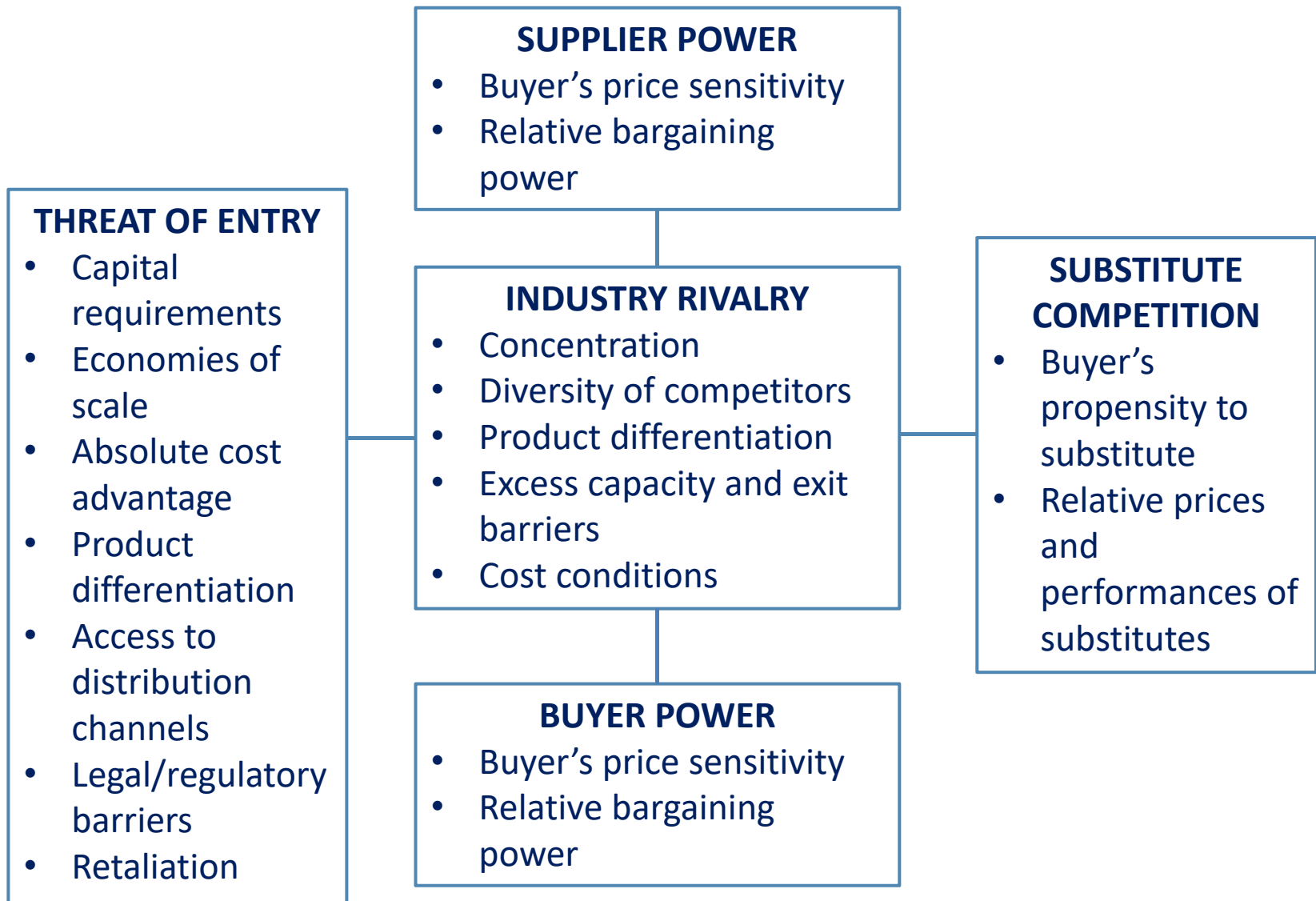
Porter's Five Forces Competition Framework (2/2)

Michael Porter's interview for the "Harvard Business Review"...

https://www.youtube.com/watch?v=mYF2_FBCvXw

VIDEO

Competition: structural determinants



Threat of Substitutes

Extent of competitive pressure from producers of substitutes depends on:

- Buyer's propensity to substitute
- The price-performance characteristics of substitutes

(The extent to which substitutes depress prices and profits depends on the propensity of buyers to substitute between alternatives)

The more complex a product and the more differentiated are buyers' preferences, the lower the extent of substitution by customers on the basis of price differences



Threat of New Entrants

- **The threat of entrants in industry profitability depends upon the entry barriers.**
- **The principle sources of barriers to entry are:**
 - Capital requirements
 - Economies of scale
 - Absolute cost advantage
 - Product differentiation
 - Access to channels of distribution
 - Legal and regulatory barriers
 - Retaliation
 - The Effectiveness of Barriers to Entry



Rivalry Between Established Competitors

The extent to which industry profitability is depressed by aggressive price competition depends upon:

- Concentration (number and size distribution of firms)
- Diversity of competitors (difference in goal, cost strategies, etc.)
- Product differentiation
- Excess capacity and exit barriers
- Cost conditions:
 - Extent of sale economies
 - Ratio of fixed to variable costs.



Bargaining Power of Buyers

- **The extent to which buyers are able to depress profitability depends on:**
 - **Buyer's price sensitivity**
 - Does the item comprise a big percentage of the buyer's total costs?
 - Is a purchased item a commodity or differentiated?
 - How intense is the competition between buyers?
 - Is the item critical to the quality of the buyer's own output?
 - **Relative bargaining power**
 - Size and concentration of buyers relative to sellers
 - Buyer's information
 - Ability to integrate backwards
- **Note: The analysis of supplier power is symmetric.**

Bargaining Power of Suppliers

- **Suppliers of commodities** often try to increase their bargaining power through the creation of organizations (eg. OPEC, the International Coffee Organization and farmer's sales cooperation).
- **Suppliers of technically sophisticated and complex components** may be able to release considerable bargaining power (ex. personal computers sector).
- **High switching costs** make it more difficult for buyers to change supply source so giving suppliers an higher bargaining power.

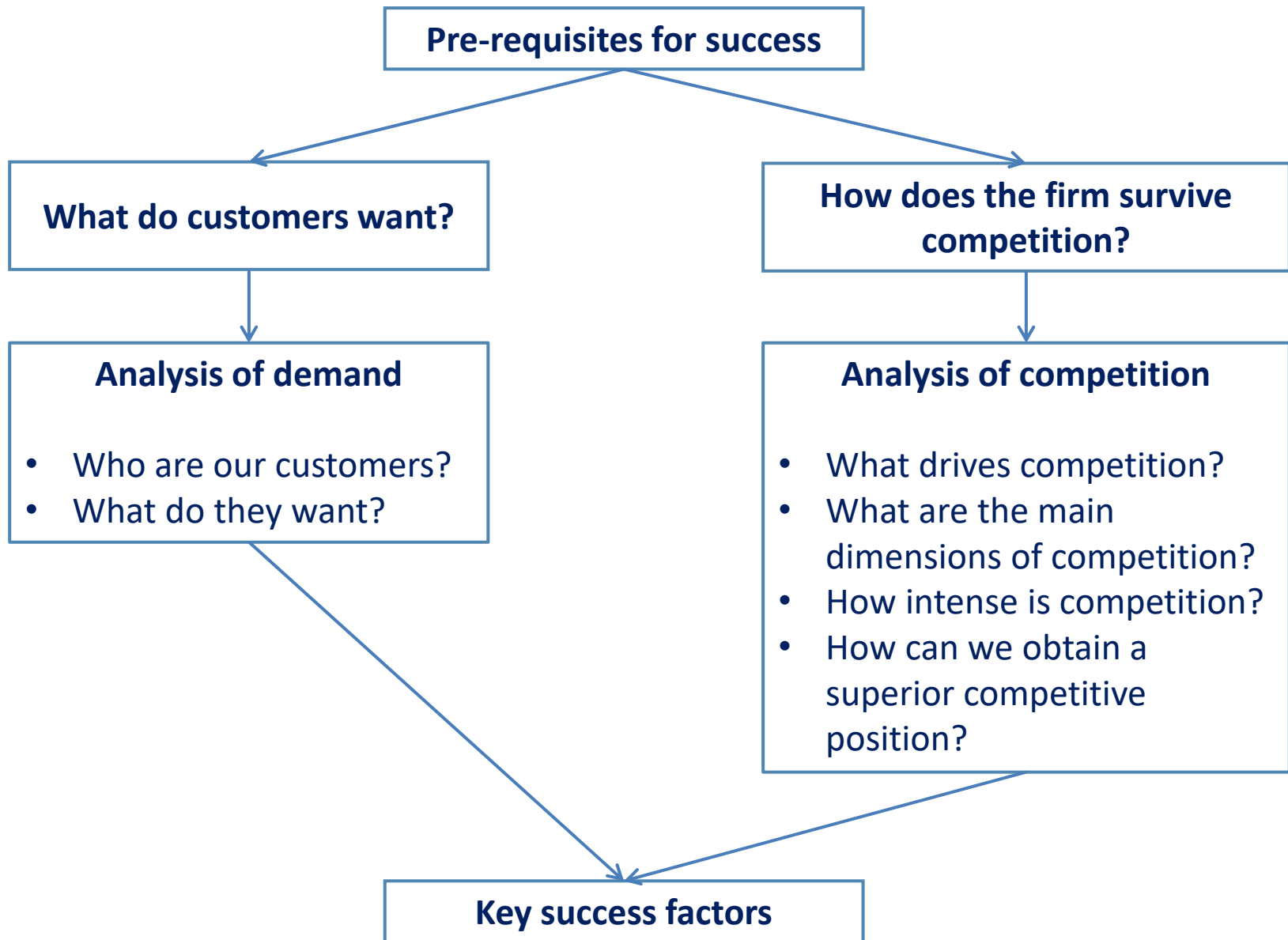
Industry Boundaries: what is the relevant market?

Economists define *an industry* "*as a group of firms that supplies a market*"

- **What industry is Ferrari in:**
 - The motor vehicle industry (SIC 371)*
 - The automobile industry (SIC 3712)*
 - The luxury car industry?
 - Global, regional (EU) or national (IT)?
- **Key criterion: SUBSTITUTABILITY**
 - On the **demand** side: Are buyers willing to substitute between types of cars and across countries?
 - On the **supply** side: Are manufacturers able to switch production between types of cars and across countries?
- **We may need to draw different industry boundaries for different types of decisions.**

*Standard industry Classification

Key Success Factors (1/3)

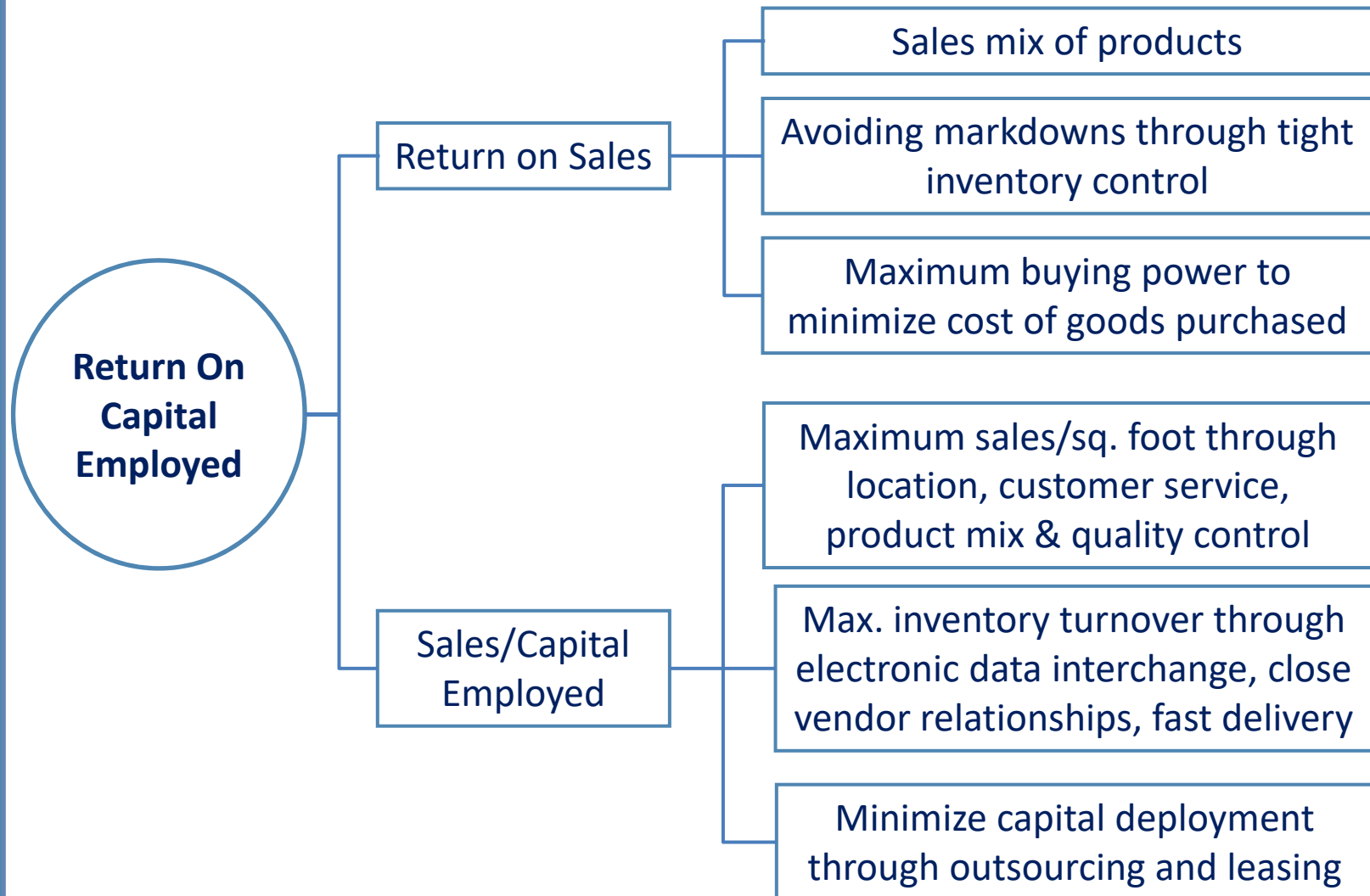


Key Success Factors:

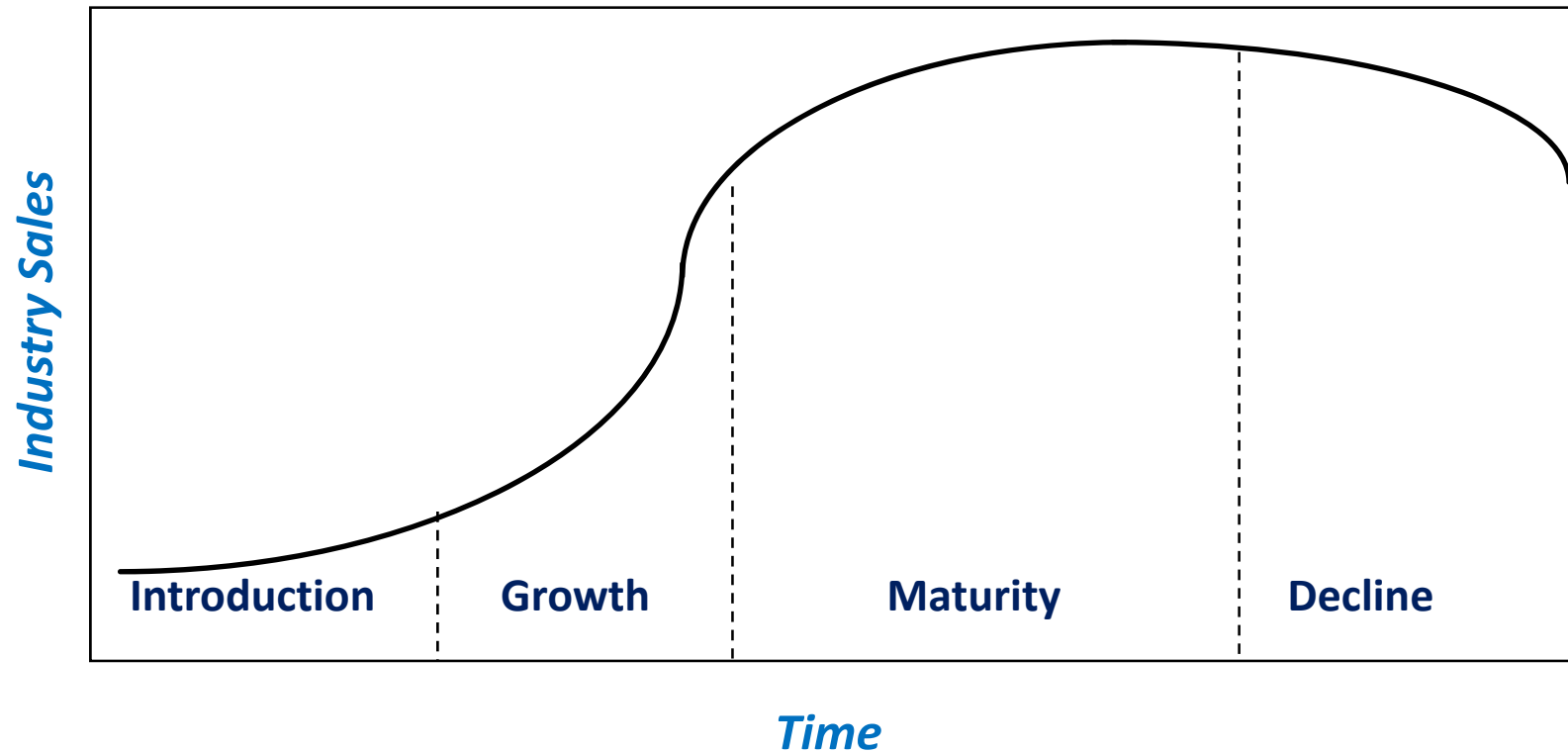
Steel, Fashion Clothing & Supermarkets (2/3)

	What do customers want?	How do firms survive competition?	Key success factors
Steel	<p>Low price</p> <p>Product consistency</p> <p>Reliability of supply</p> <p>Specific technical specifications for special steels.</p>	<p>Strong price competition and cyclical profitability necessitates cost efficiency and strong financial resources.</p>	<p>Cost efficiency through: large-scale plants, low-cost location, speedy capacity adjustment</p> <p>Or hi-tech mini-mills can achieve low costs through flexibility and high productivity</p> <p>Quality and service differentiation</p>
Fashion clothing	<p>Demand segmented by garment type, style, quality, color.</p> <p>Customers pay price premium for brand, style, exclusivity and quality.</p>	<p>Intensely competitive due to low entry barriers, low seller concentration and strong retail buying power</p> <p>Differentiation can yield substantial price premium but imitation rapid.</p>	<p>Combining differentiation with low-costs</p> <p>Key differentiation variables: design, speedy to fashion trends, brand reputation, quality</p> <p>Cost efficiency requires manufacture in low wage countries.</p>
Supermarkets	<p>Low price</p> <p>Convenient location</p> <p>Wide range of products adapted to local preferences</p> <p>Freshness of produce, good service, pleasant ambience, easy parking.</p>	<p>Market localized</p> <p>Intensity of price competition depends on number and proximity of competitors</p> <p>Bargaining power a critical determinant of cost of bought-in-goods.</p>	<p>Low-cost operation requires operational efficiency, scale-efficient stores, strong buying power, low wage costs</p> <p>Differentiation requires wide product range (hence, large stores), convenient location, easy parking.</p>

Key Success Factors: analyzing profit drivers (3/3)



The Industry Evolution Life Cycle



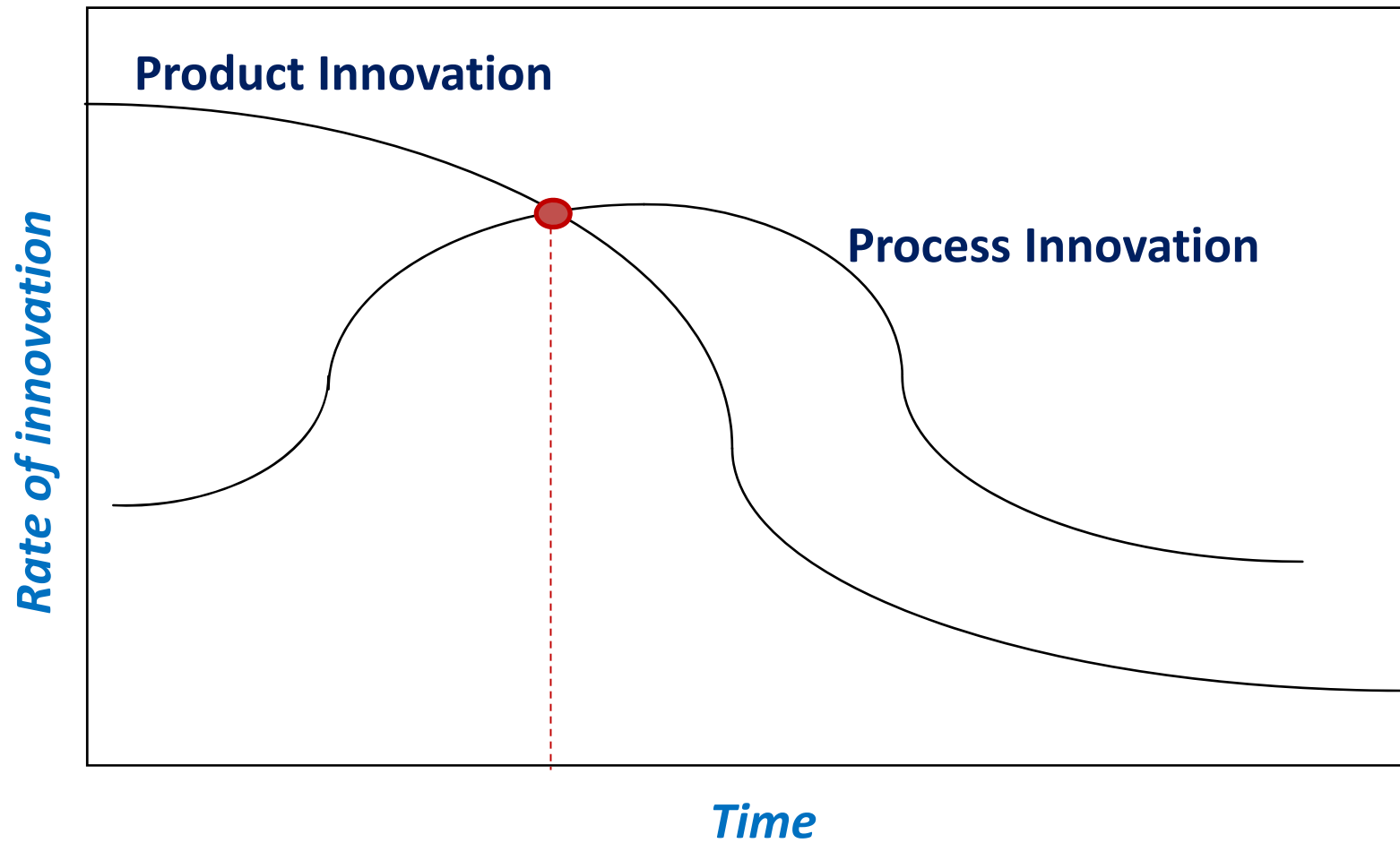
Drivers of industry evolution:

- Demand growth
- Creation and diffusion of knowledge

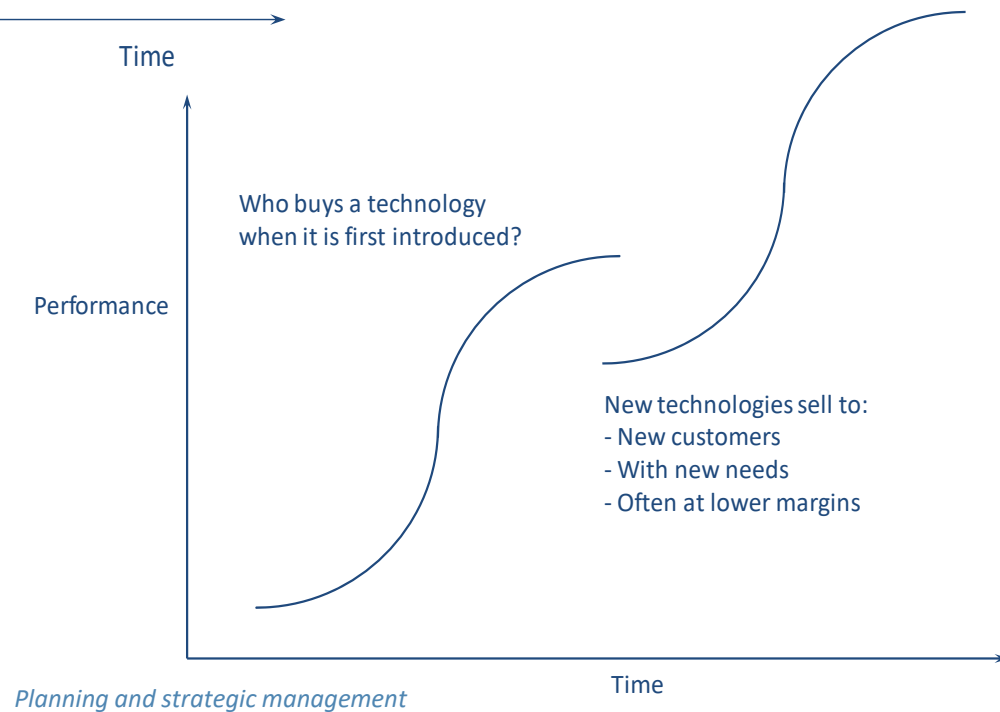
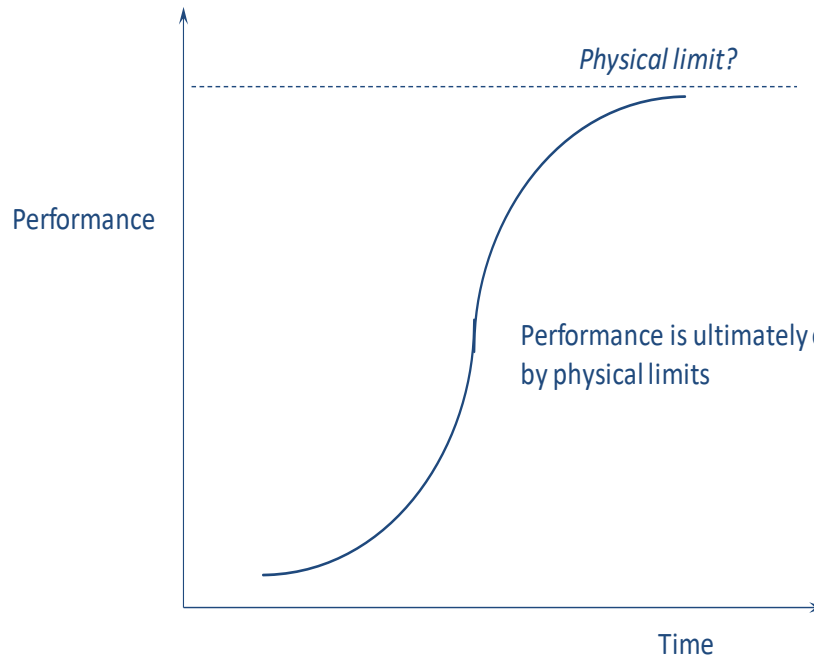
Industry Structure and Competition

	Introduction	Growth	Maturity	Decline
Demand	Early adopters	Rapid increase in market penetration	Replacement/ repeat buying; price sensitive customers	Obsolescence
Technology	Competing technologies; rapid product innovation	Standardization; rapid process innovation	Diffused know how; incremental knowledge	Little innovation
Products	Wide variety of features and designs	Design & quality improve; dominant design emerges	Commoditization; brand differentiation	Differentiation difficult
Manufacturing	Short-runs, skill intensive	Capacity shortage; mass production	Over-capacity emerges, deskilling	Overcapacity
Trade	Production shifts from advanced to emerging companies			
Competition	Few companies	Entry, mergers exist	Shakeout and consolidation	Price wars and exit
KSFs	Product innovation	Design for manufacture; process innovation	Cost efficiency (scale economics low cost inputs)	Low overheads; rationalization

Product and Process Innovation: rate/time



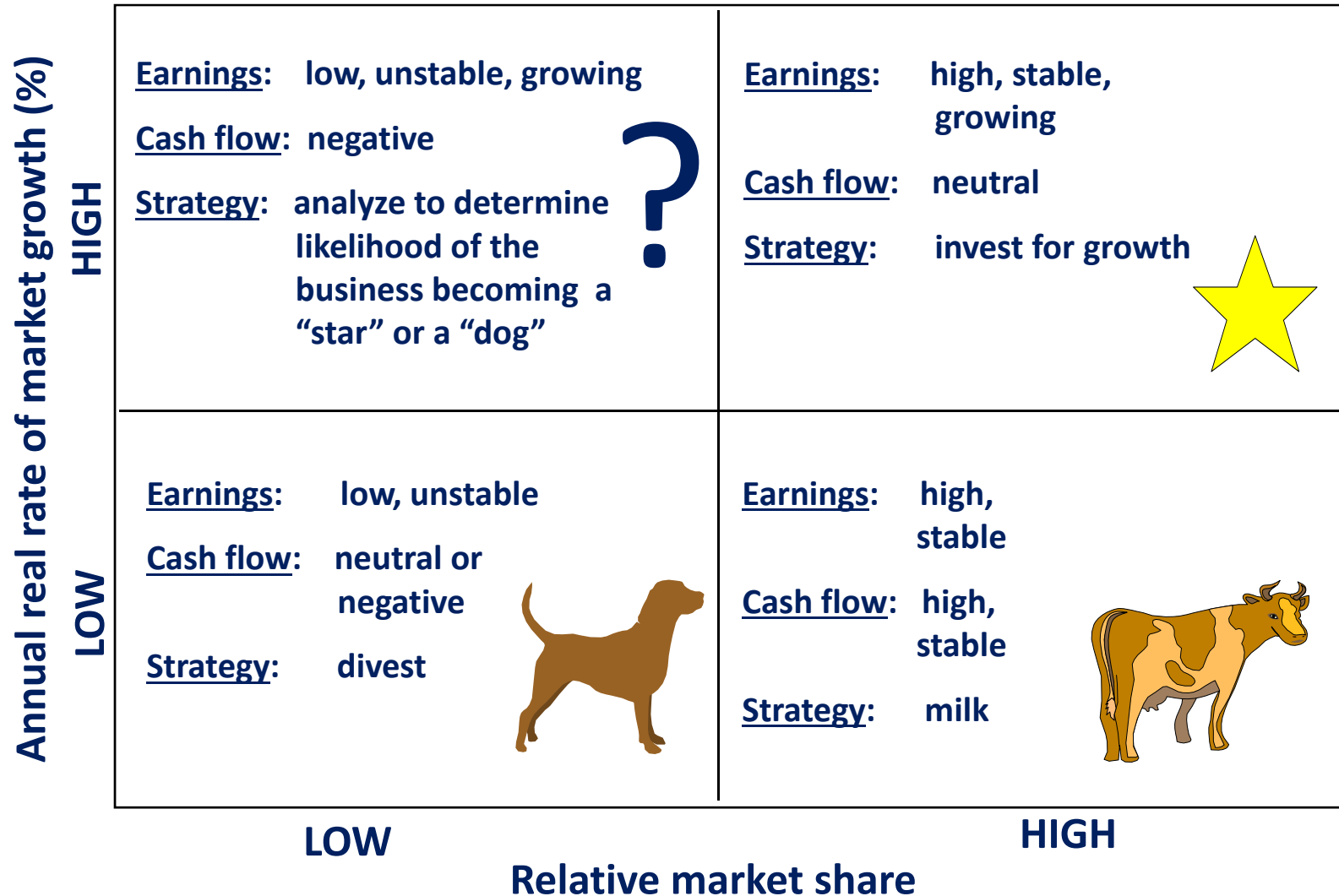
Technology diffusion: S-curves (1/2)



Technology diffusion: S-curves (2/2)

- It depicts *how a product, service, technology or business progresses evolves over time.*
- It can be viewed on an incremental level to map product evolutions and opportunities, or on a macro-scale to describe the evolution of businesses and industries.
- On a product, service, or technology level, ***S-curves are usually connected to “market adoption”*** since the beginning of a curve relates to the birth of a new market opportunity, while the end of the curve represents the death, or obsolescence of the product, service, or technology in the market.
- Usually ***the end of one S-curve marks the emergence of a new S-curve*** (e.g., video cassette tapes versus DVDs etc...).
- ***Some industries and technologies move along S-curves faster than others.***
- ***High tech S-curves tend to cycle more quickly than other consumers.***

Portfolio Planning Models: BCG Growth-Share Matrix



CASE STUDY



- Adapt Porter's Five Forces scheme to these world wide firms operating in two completely different industries.